

Amendments to the Claims:

The listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

Claim 1 (currently amended) A focusing method for a moving object which utilizes a photographic instrument to take images of a moving object, and focuses said photographic instrument by means of a pattern matching method, comprises the following steps:

setting ~~set~~-an optimal matching pattern position;

retrieving ~~retrieve~~-a serial image of said moving object;

acquiring ~~acquire~~-an initial pattern of said moving object and an initial pattern position according to said serial image; and

comparing ~~compare~~-said initial pattern position and said optimal matching pattern position so as to make an adjustment in the photographic angle of said photographic instrument;

wherein the step of acquiring said initial pattern comprises the following sub-steps:

retrieving an image of said serial image;

figuring out a gray histogram of said image;

figuring out a histogram projection drawing of said image; and

acquiring said initial pattern and said initial pattern position according to said gray histogram and said histogram projection drawing.

Claim 2 (original) The focusing method for a moving object of claim 1, wherein said optimal matching pattern position is the focus of said photographic instrument.

Claim 3 (original) The focusing method for a moving object of claim 1, wherein said optimal matching pattern position is around the focus of said photographic instrument.

Claim 4 (cancelled)

Claim 5 (original) The focusing method for a moving object of claim 1, wherein the adjustment of said photographic angle is the conversion of the difference between said initial pattern position and said optimal matching pattern position into the adjusted photographic angle of said photographic instrument.

Claim 6 (currently amended) A focusing method for a moving object which utilizes a photographic instrument to take images of a moving object, and focuses said photographic instrument by means of a pattern matching method, comprises the following steps:

retrieving ~~retrieve~~ a serial image of said moving object;

acquiring ~~acquire~~ an initial pattern of said moving object and an initial pattern position according to said serial image;

carrying ~~carry~~ out pattern matching and search for an optimal matching position of said moving object according to said serial image;

acquiring ~~acquire~~ an updated pattern and an updated pattern position of said moving object according to said optimal matching position; and

making ~~make~~ an adjustment in a photographic angle of said photographic instrument according to said updated pattern position;

wherein the step of acquiring said initial pattern comprises the following sub-steps:

retrieving an image of said serial image;

figuring out a gray histogram of said image;
figuring out a histogram projection drawing of said image; and
acquiring said initial pattern and said initial pattern position according to said gray histogram and said histogram projection drawing.

Claim 7 (original) The focusing method for a moving object of claim 6, wherein said pattern matching is carried out according to the comparison between said initial pattern and the image of said serial image.

Claim 8 (original) The focusing method for a moving object of claim 6, wherein the determination of said optimal matching position is based on the comparison between said initial pattern and the image of said serial image, so as to decide that the image of said serial image would represent the pattern position of said moving object.

Claim 9 (cancelled)

Claim 10 (currently amended) The focusing method for a moving object of claim 6, wherein the step of acquiring ~~acquisition of~~ said updated pattern comprises the following sub-steps of steps:

retrieving ~~retrieve~~ an updated image of said serial image according to said optimal matching position;

figuring ~~figure~~ out a gray histogram of said updated image;

figuring ~~figure~~ out a histogram projection drawing of said updated image;

and

acquiring ~~acquire~~ said updated pattern and said updated pattern position according to said gray histogram and said histogram projection drawing.

Claim 11 (currently amended) The focusing method for a moving object of claim 6 or 10, wherein before the sub-step ~~step~~ of figuring out a gray histogram for said updated image, further comprises a sub-step ~~step~~ of carrying out local enhancement according to said initial pattern.

Claim 12 (original) The focusing method for a moving object of claim 6, wherein the adjustment of said photographic angle is the conversion of the difference between said initial pattern position and said updated pattern position into said adjusted photographic angle.